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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/611,773	06/30/2003	Robert C. Knauchhase	42P15900	1902

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EXAMINER

GEREZGIHER, YEMANE M

ART UNIT	PAPER NUMBER
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2144

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/611,773	Applicant(s) KNAUERHASE ET AL.	
	Examiner Yemane M. Gerezgiher	Art Unit 2144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This application has been examined. Claims 1-30 are pending.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 22-30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 22 and 26 recite "...a machine-accessible media ..." (see Claim 22, Claim Line 1) and similarly in claim 26, Claim Line 2.

The machine-accessible media is not limited to statutory subject matter. In view of Applicant's disclosure, specification pages 17-18, ¶0048, the machine-accessible media is not limited to tangible embodiments, instead being defined as including both tangible embodiments [e.g., computer readable storage media, see page 17, ¶0048 "...storage devices 708 and their associated storage media, including hard-drives, floppy-disks, optical storage, tapes, flash"]

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memory, memory sticks, ...”] and intangible embodiments [e.g., transmission media or other suitable media in which logic may be encoded for carrying instructions, See page 18, ¶0048, “...delivered over transmission environments, including network 722, in the form of packets, serial data, parallel data, propagated signals, etc”. As such, the claims is/are not limited to statutory subject matter and is therefore non-statutory.

Claim 29 recite a client system comprising an application program and intermediary configured to perform some function as recited. However, the claim as recited is merely software per se, which operates within the confinement of a software environment, which by it self does not produce any useful and tangible function and is therefore non-statutory.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

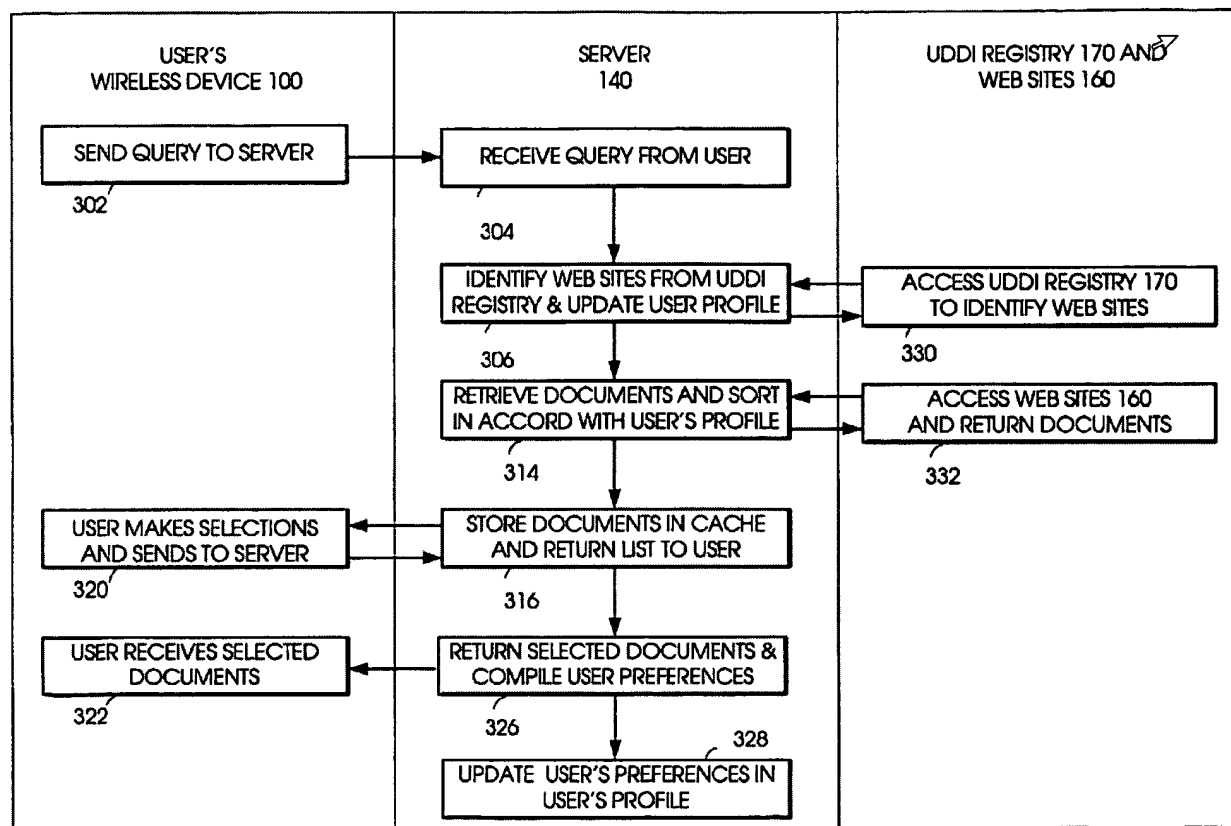
(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent

or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 3-5, 8-15, 22, 24 and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Nykanen (U.S. Patent Number 7,155,425).

As per claims 1 and 22, Nykanen disclosed a method for an intermediary to provide responses to discovery requests for services when a registry of services is unavailable (abstract and Column 2, Lines 7-41), comprising: receiving from a client a discovery request for a service (Fig. 4B, # 302-304, and Column 2, Lines 7-10, intermediary proxy server receiving a discovery inquiry from a client terminal); determining the registry is unavailable (Column 9, Line 13, offline queries to the UDDI registry); altering the discovery request into a modified request appearing to originate from the intermediary (Fig. 4B (also disclosed below), #306, intermediary proxy server arrange the received discovery query to the registry); and queuing the modified discovery request for delivery to the registry when it becomes available (Fig. 4B, # 330, Column 2, Line 66 through Column 3, Line 7 and Column 14, Lines 35-60).

FIG. 4B



As per claims 3 and 24, Nykanen disclosed determining the registry is available (Column 14, Lines 25-40); forwarding the modified request to the registry (Fig. 4B, # 306 → 330, retransmitting discovery query request received from a user to the registry); receiving a reply from the registry for the forwarded discovery request (Fig. 4B, # 306, result received from the registry at the proxy/intermediary server); altering the reply into a modified reply appearing to

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originate from the intermediary; and sending the modified reply to the client (Column 14, Lines 25-60).

As per claims 4, 5, 13 and 25, Nykanen disclosed that the reply from the registry includes an identification of a service provider available to perform the requested service (Column 3, Lines 36-38 and Column 14, Lines 44-50). Nykanen further disclosed receiving at least one service request from the client for utilizing the service (Fig. 4B, # 320 and Column 14, Lines 60-64); altering the service request into a modified service request appearing to originate from the intermediary; and forwarding the modified service request to the service provider available to perform the requested service (Fig. 4B and Column 14, Lines 33-67).

As per claim 8, Nykanen disclosed that the discovery request comprises a UDDI discovery request (Abstract and Column 2, Lines 7-10).

As per claim 9, Nykanen disclosed an online client state or offline client state indicative of whether the client is communicatively coupled with the service registry (Column 2, Lines 7-26, Column 9, Lines 13-14).

As per claim 10, Nykanen disclosed receiving at least one successive request from the client for the service (Fig. 4B, # 320); if in the online client

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state, replying to the client that the service is no longer provided (Column 9, Line 13 (client on-line and offline status), Fig. 4B, # 302-304, and Column 2, Lines 7-10).

As per claims 11 and 12, Nykanen disclosed receiving at least one successive request from the client identifying the service (Fig. 4B, # 320, Column 3, Lines 36-38 and Column 14, Lines 44-50, identified web sites/providers); and replying to the client that the service is no longer provided Column 9, Line 13 (client on-line and offline status), Fig. 4B, # 302-304, and Column 2, Lines 7-10), wherein the client is configured to repeat its discovery request for the service responsive to the reply the service is no longer provided (Column 3, Lines 4-40).

As per claim 14, Nykanen disclosed at least the client and intermediary utilize an asynchronous communication protocol (Column 1, Line 11 through Column 2, Line 65, since the teachings of Nykanen disclosed caching and/or queuing the queries or interactions of client with the registry via an intermediary, the communication protocol is implicitly asynchronous).

As per claim 15, Nykanen disclosed wherein the client performs an other task while waiting for a response to an asynchronous discovery request

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(Column 5, Lines 12-67, performing web based interaction using protocols and platforms that implicitly allow multi-threading/multitasking).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2, 6, 7, 16-21, 23, 26-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nykanen (U.S. Patent Number 7,155,425) in view of Freed et al. (U.S. Patent Number 7,149,892) hereinafter referred to as Freed.

Claims 2, 7, 19, 23, 26 and 29, recite limitations substantially similar as recited in claims 1 and 22. Thus, these claims (19, 26 and 29) are rejected with the same rationale claims 1 and 22 are rejected above. Nykanen substantially disclosed the invention as claimed. However, Nykanen was silent about

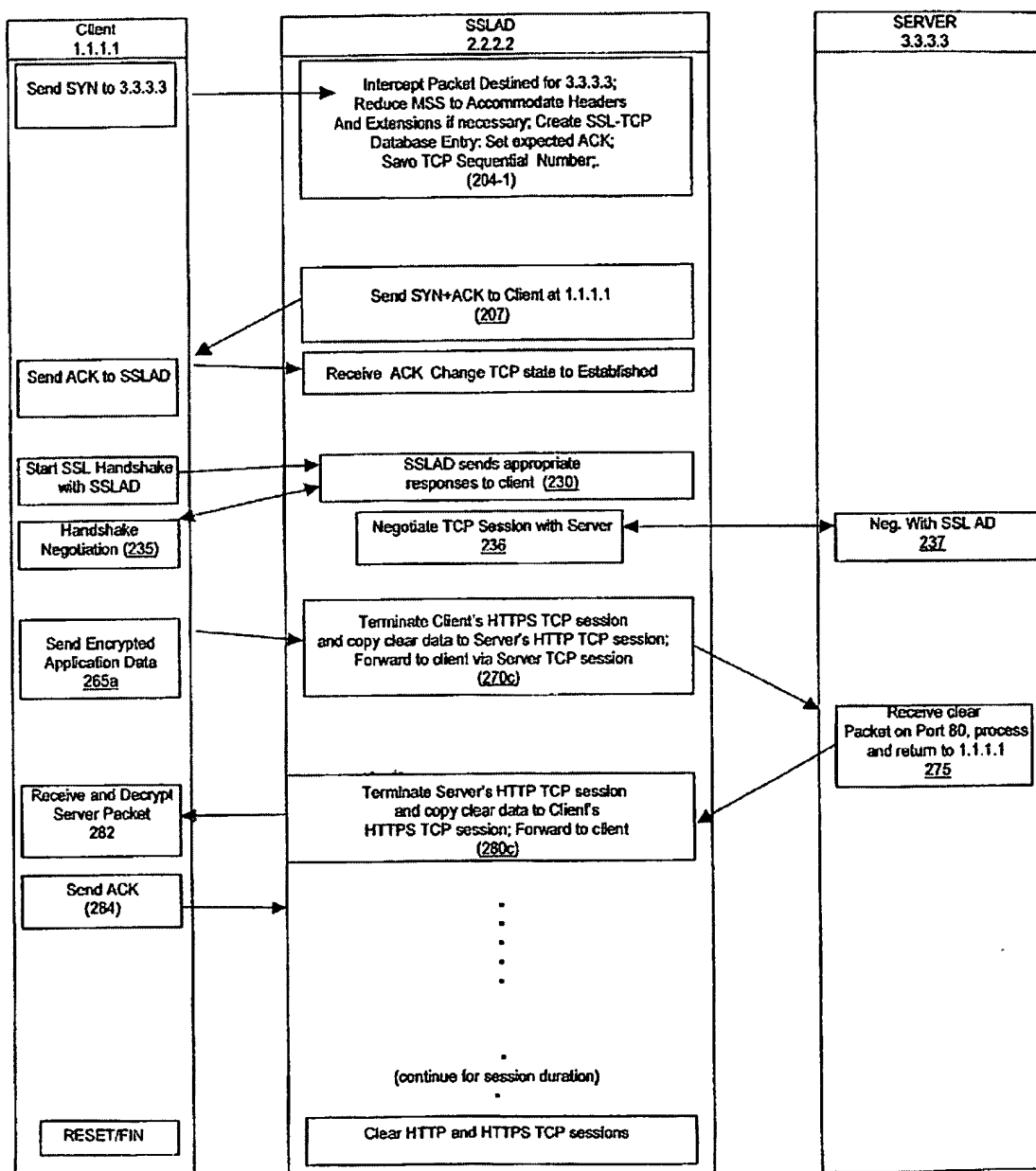
providing a dummy response to the request indicating the service is available or in the alternative language as described in claim 19, Nykanen was silent about "replying to the client that a pseudo service provider is available to perform the requested service".

However, such a feature was known in the art at the time the invention was made. For example in a skill based routing, a client's request for service is received by a proxy device, queued at the proxy device and an acknowledgment is sent to the requesting client indicating the service is available when in fact sometimes service providing agents are temporarily unavailable to process and service the request. Furthermore, as evidenced by the teachings of the prior art, Freed disclosed an intermediary device (Fig. 7 (also disclosed below), # SSLAD) intercepting a request from a client intended to a remote server (Fig. 7, Server); the intermediary device intercepting the request and sending a dummy ACK response to the client called TCP ACK acceleration (duping the client that server is available and ready to process the request) and the intermediary device later retransmitting the request originated from the client by negotiating a TCP session with the server (see Fig. 7 and Column 11, Lines 51-67). Thus, it is respectfully submitted that it would have been obvious to one of ordinary skill in the art at the time the invention was made to take the commonly known feature disclosed above in the teachings of Freed related to intermediary accelerator device and have modified the teachings of Nykanen in order to

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facilitate communication traffic between the client and the server (Freed, Column 3, Lines 62-67).

FIGURE 7 (Full TCP Proxy Mode)



As per claims 6 and 16-18, Nykanen substantially disclosed the invention as claimed. However, Nykanen was silent about timing the duration of no response from the server (service provider) and when a predetermined threshold reaches, indicating availability or unavailability of service by replying an error message to the requesting client and allowing a client to retry the request. However, such a feature was well known in the art at the time the invention was made. For example, see Baker, USPAT 7035921, Abstract Figs. 2-5 and Column 2, Lines 8-44). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to take the commonly known feature as described by Baker and have modified the teachings of Nykanen in order "to avoid waiting for an unavailable server" and further in order to "help provide more user-friendly recovery information for addressing failed or otherwise unavailable servers" (see Baker, Column 2, Lines 8-12).

As per claims 20 and 27: Nykanen disclosed receiving a reply from the registry responsive to the modified discovery request (Fig. 7, # 330), the reply identifying a service provider available to perform the requested service (Column 3, Lines 36-38 and Column 14, Lines 44-50, identified web sites/providers); receiving a service request from the client for utilizing the service (Fig. 4B, # 320 and Column 14, Lines 60-64); altering the service

request into a modified service request appearing to originate from the intermediary; and submitting the modified service request to the service provider (Column 14, Lines 25-60).

As per claims 21 and 28, Nykanen disclosed receiving a response from the service provider; altering the response into a modified response appearing to originate from the intermediary; and sending the modified response to the client Fig. 4B and Column 14, Lines 35-64).

As per claim 30, Nykanen disclosed that the intermediary is further configured to forward discovery requests to a registry when the client obtains an online state (Column 9, Line 13 (client on-line and offline status), Fig. 4B, # 302-304, and Column 2, Lines 7-10, intermediary proxy server receiving a discovery inquiry from a client terminal; forwarding the request to a registry, see Fig. 4B, # 330, Column 2, Line 66 through Column 3, Line 7 and Column 14, Lines 35-60).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. McCullough (US 7054618 B1) entitled: "Method of registering a communication device with a proxy server based service"
- b. Wolochow et al. (US 20030100307 A1) entitled: "Automatic service handoff method and apparatus"
- c. Gebhart (US 20030158915 A1) entitled: "Dynamic component transfer"
- d. Han et al. (US 20020143819 A1) entitled: "Web service syndication system"
- e. Murto et al. (US 20040213409 A1) entitled: "Service discovery access to user location"

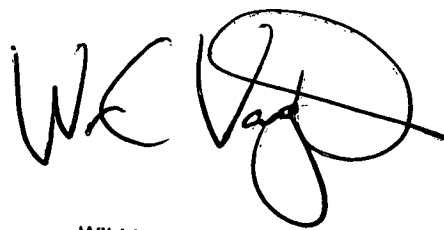
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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yemane M. Gerezgiher whose telephone number is (571) 272-3927. The examiner can normally be reached on 9:00 AM - 6:00 PM Mon - Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William C. Vaughn can be reached on (571) 272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

YMG


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